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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,247

04/02/2007

Reed Gamble

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(C/O PATENT ADMINISTRATOR)  
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EXAMINER

KARPINSKI, LUKE E

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

12/16/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,247	<b>Applicant(s)</b> GAMBLE, REED	
	<b>Examiner</b> LUKE E. KARPINSKI	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,10-12,16-23,25,26,28,30-36,38,39 and 42-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,10-12,16-23,25,26,28,30-36,38,39, and 42-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/2010 has been entered.

### ***Claims***

Claims 3, 6-9, 13-15, 24, 27, 29, 37, 40, and 41 are canceled.

Claim 45 is new.

Claims 1, 10-12, 25, 30, 32-36, 38, and 39 are amended.

Claims 1, 2, 4, 5, 10-12, 16-23, 25, 26, 28, 30-36, 38, 39, and 42-45 are pending and under consideration in this action.

### ***Rejections***

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**1. Claims 1, 2, 4, 5, 10-12, 16-20, 22, 23, 25, 28, 30, 31, 39, and 42-45 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin in view of USPN 6,037,280 to Edwards et al.

***Applicant Claims***

Applicant claims a patch comprising an adhesive layer and a material layer comprising one or more UVA and UVB agents providing a SPF of 15 or greater and wherein said patch is transparent.

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Applicant further claims a SPF of 40, said UV agents on the surface of said material layer, UV agents within the adhesive layer, specific UV agents, specific adhesive application patterns, a layer for protecting said adhesive layer, said material layer as a fabric, tape, or film, shapes for said patch, said patch as waterproof, methods of manufacturing said patch comprising bringing an adhesive layer in contact with a material layer, and application of said patch to moles on the skin.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Muchin teaches dermatological patches comprising an adhesive layer and a pad, which reads on said material layer, wherein said patch may be transparent (abstract). additives applied to the adhesive layer or the pad (col. 6, lines 13-19), optional ingredients including UV absorbers, which reads on said additives (col. 5, line 48 to col. 6, line 1), zinc oxide from 0.01-500 microns (col. 4, lines 34-56), which reads on a UVA and UVB absorber, application of said adhesive to said pad (col. 4, lines 27-29), as pertaining to claims 1, 25, 28, 30, and 39, and application of said patches to the skin as pertaining to claim 30.

Muchin further teaches said additives, which includes said UV agents, applied to said pad (col. 6, lines 13-14), which reads on the surface as pertaining to claim 11, zinc oxide reads on claim 12, said adhesive layer not applied to the entire pad (col. 3, lines 45-50), as pertaining to claim 16, a liner applied to said adhesive pad (col. 7, lines 45-61), as pertaining to claims 17 and 18, said pad comprising any suitable substrate material including nylon cloth (col. 2, line 60 to col. 3, line 2) or a film (col. 3, line 22),

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which reads on the fabric of claim 19 and film of claim 20, and said patch as circular (col. 7, lines 24-27), as pertaining to claim 22.

***Ascertainment of the Difference between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Muchin does not teach an SPF of 15-40 as claimed in claims 1, 4, 5, 31, 39, 42, and 43. This deficiency in Muchin is cured by Edwards et al. Edwards et al. teach textiles containing UV agents and having an SPF of over 25 (col. 2).

Further, Muchin does not teach said UV agent within the interstitial spaces of the material layer as claimed in claim 10. This deficiency is cured by Edwards et al. Edwards et al. teach said UV agents may be attached to the surface or interstitial spaces of said fabric (col. 2, lines 56-60).

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

Regarding the SPF of said patches, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin with any desired SPF as taught by Edwards et al. in order to produce the invention of instant claims 1, 4, 5, 31, 39, 42, and 43.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches patches comprising UV agents within the adhesive and material layer, which may be a fabric, and Edwards et al. teach types of fabric. comprising UV agents

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and having a SPF of 25 or greater. Therefore it would have been obvious to utilize the known SPF range of Edwards et al., in the patches of Muchin in order to produce a fabric backing layer with a desired SPF. Further, one of ordinary skill in the art is well aware that a modification of the amount or type of UV agent will result in a modification of the SPF value and one of ordinary skill in the art would have been capable of said modification to the desired value.

Regarding said UV agents being found within the interstitial spaces of the material layer, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce a backing material with said UV agents attached to the surface or within the interstitial spaces thereof in order to produce the invention of instant claim 10.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches patches comprising UV agents within the material layer, which may be a fabric, and Edwards et al. teach types of fabric comprising UV agents attached to the surface or within the interstitial spaces thereof. Therefore it would have been obvious to incorporate said UV agents onto or within a material layer as taught by Edwards et al., in the patches of Muchin in order to produce a fabric backing layer having UV agents attached in a known manner.

Regarding the limitation of said second layer being opaque to UV radiation, said second layer having UV agents incorporated therein would inherently be opaque to UV radiation.

Regarding the limitation of said adhesive on the peripheral edge of said patch, Muchin et al. teach that the entire surface of said patch does not require coverage with said adhesive and one of ordinary skill would have been more than capable of choosing the design application of said adhesive to the periphery of said patch to ensure proper adhesion while reducing the required amount of adhesive.

Regarding said patch as waterproof, the combined patches of Muchin and Edwards et al. comprise all of the same components as the claimed patches and therefore would also possess all of the same properties, including being waterproof.

Regarding the limitations of said patch applied to a specifically susceptible area of skin or to a mole, the patches of Muchin are for application to any area of the skin, as are the patches of Edwards et al., it would have been obvious to apply said patches to skin having a mole.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**2. Claims 33-36 and 38 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of US/2003/0175328 to Shefer et al.



***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims specific UV agents.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches the incorporation of UV agents, including zinc oxide, to patches and Edwards et al. teach the incorporation of UV agents to textiles.

***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach the specific UV agents as claimed in claims 33-36 and 38. This deficiency in the combination of art is cured by Shefer et al. Shefer et al. teach patches comprising sunscreens [23], including octylmethoxycinnamate, oxybenzone, and ethyl hydroxypropyl aminobenzoate [35].

***Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)***

Regarding claims 33-36 and 38, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin and Edwards et al. with octylmethoxycinnamate, oxybenzone, and/or ethyl

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hydroxypropyl aminobenzoate as taught by Shefer et al. in order to produce the invention of instant claims 33-36 and 38.

One of ordinary skill in the art would have been motivated to do this because Muchin and Shefer et al. are both drawn to patches comprising sunscreen agents and Shefer et al. teaches specific agents known to be used in patch formulations. Therefore it would have been obvious to utilize the UV agents of Shefer et al., in the patches of combined references Muchin and Edwards et al. in order to produce a patch with UV agents known to be used in patches.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**3. Claims 21 and 26 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of USPN 5,167,649 to Zook.

### ***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims said material layer as a gel type.

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***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches that any suitable pad material is usable (col. 2, lines 60-64).

***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach a gel pad material as claimed in claims 21 and 26. This deficiency in the combination of art is cured by Zook. Zook teaches transparent transdermal gel patches (abstract).

***Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)***

Regarding claims 21 and 26, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin and Edwards et al. with a gel pad as taught by Zook in order to produce the invention of instant claims 21 and 26.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches that any suitable pad material may be used and Zook teaches that transparent gel patches are known. Therefore it would have been obvious to utilize the gel patch of Zook, in the patches of Muchin in order to produce a patch with a different known backing material.

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From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**4. Claim 32 is rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of USPN 6,103,275 to Seitz et al.

#### ***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims PABA as said UV agent.

#### ***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches the incorporation of UV agents.

#### ***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach PABA as claimed in claim 32. This deficiency in Muchin is cured by Seitz et al. Seitz et al. teach two gels which may be

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applied as a transdermal patch (col. 3, lines 35-41) and that said formulations may comprises sunscreen agents including PABA (col. 6, lines 15-20).

***Finding of Prima Facie Obviousness Rational and Motivation***

***(MPEP §2142-2143)***

Regarding claim 32, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin with PABA as taught by Seitz et al. in order to produce the invention of instant claim 32.

One of ordinary skill in the art would have been motivated to do this because Muchin and Seitz et al. both teach patches comprising UV agents and Seitz et al. teach that PABA is a UV agent known to be used in patches. Therefore it would have been obvious to utilize the PABA of Seitz et al., in the patches of Muchin in order to use a UV agent known to be used in other patch formulations.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

***Response to Arguments***

Applicant's arguments filed 11/17/2010 have been fully considered but they are not persuasive.

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Applicant argues that Muchin does not teach UVA and UVB agents.

This argument is not found persuasive because Muchin teaches zinc oxide, which is both a UVA and UVB agent.

Applicant also argues that Muchin does not teach UV agents within the pad.

This argument is not found persuasive because Muchin teaches that said pad may comprise additional components and in the paragraph previous, Muchin teaches optional components, which read on additional components, including sunscreen agents.

Applicant also argues that the examiner is using improper hindsight.

This argument is not found persuasive because it was well known at the time of the instant invention to incorporate UV agents into transdermal patches and adhesives, transparent patches were also well known. Muchin teaches that these ideas were known at the time. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant also argues that there is no motivation to increase the SPF of the patches of Muchin because said patch is intended to be removed from the skin within a short period of time.

This argument is not found persuasive, although Muchin gives particular attention to a patch for removing keratotic plugs from the skin, Muchin also states "the dermatological patch may be used in addition to, or in place of removing keratotic plugs from the skin" (col. 8, lines 50-56). Therefore the patches of Muchin are not always intended for short-term application and one would be motivated to increase the SPF of said patches to protect the skin or patch formulation itself from solar radiation. Muchin teaches the addition of sunscreen agents which are intended to protect from UV radiation and therefore it would have been obvious to add additional UV agents or to modify the SPF to the desired value.

Applicant also argues that Shefer et al. teach UV agents for a use other than for UV protection.

This argument is not found persuasive because Shefer et al. contains no such statement or implication that said agents are not intended for UV protection. Further, this would be considered an intended use which is not given much weight, as said components would inherently act as UV agents. In response to applicant's argument, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

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Applicant also argues that Shefer et al. teach a single layer and do not disclose any SPF values. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Arguments pertaining to Jenkins et al. are moot in view of said rejection having been withdrawn.

### ***Conclusion***

Claims 1, 2, 4, 5, 10-12, 16-23, 25, 26, 28, 30-36, 38, 39, and 42-45 are rejected.  
No claims are allowed.

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUKE E. KARPINSKI whose telephone number is (571)270-3501. The examiner can normally be reached on Monday Friday 9-5 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEK

/Mina Haghighatian/  
Primary Examiner, Art Unit 1616